
IN THE UNITED STATES DISTRICT COURT
DISTRICT OF UTAH - CENTRAL DIVISION

WORLD SPORTS PRODUCTS, INC., d/b/a
TREND SPORTS, a Nevada corporation,

Plaintiff,

v.

THE JUGS COMPANY, an Oregon
corporation, and JUGS, INC., an Oregon
corporation,

Defendants.

JUGS, INC., an Oregon corporation,

Counterclaimant,

v.

WORLD SPORTS PRODUCTS, INC., d/b/a
TREND SPORTS, a Nevada corporation, and
WILLIAM COLE LAY, an individual,

Counterclaim Defendants.

**MEMORANDUM OPINION AND
ORDER**

Case No. 2:08-CV-00173

Judge Dee Benson

The court held a *Markman* hearing on November 3, 2009, to construe the claims of U.S. Patent No. 6,739,325 (the “325 patent”). Plaintiff/Counterclaim Defendant World Sports, Inc., d/b/a Trend Sports and Counterclaim Defendant William Cole Lay (“Trend”) were represented by Craig Madsen. Defendant Jugs Company and Defendant/Counterclaimant Jugs, Inc. (“Jugs”) were represented by Peter Hueser and Elizabeth Milesnick. After taking the parties’ proposed claim constructions under advisement, the court has further considered the law and facts relating to the claim construction. Being fully advised, the court renders the following Memorandum Opinion and Order.

BACKGROUND

Trend and Jugs are manufacturers of sports related equipment. At issue in this dispute is the ‘325 patent owned by Jugs. The ‘325 patent is directed to a ball throwing machine that is of minimum size and weight. The ball throwing machine includes a frame supporting at least one wheel mounting a pneumatic tire that is driven rotationally by at least one electric motor. On March 4, 2008, Trend filed an action seeking a declaratory judgment that Trend does not infringe the ‘325 patent and that the ‘325 patent is invalid. On August 13, 2008, Jugs filed an answer to Trend’s complaint and asserted a counterclaim for infringement of the ‘325 patent. As a result, it is necessary that the court construe the disputed terms and phrases within the claims of the ‘325 patent.

CLAIM CONSTRUCTION

Claim construction is a matter of law. *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 391 (1996). The trial judge therefore “has the duty and responsibility to interpret [any] claims at issue.” *Exxon Chemical Patents, Inc. v. Lubrizol Corp.*, 64 F.3d 1553, 1556 (Fed. Cir. 1995). In the present case, the parties dispute the construction of six different terms and phrases contained and purportedly contained within the claims of the ‘325 patent. These disputed terms and phrases are underlined below. The claims of the ‘325 patent read:

I claim:

1. A baseball throwing machine including a frame supporting at least one ball projecting wheel driven rotationally by an electric motor and mounting a pneumatic tire having a diameter ranging between about 15–32 cm; a wall depth ranging between about 5–10 cm; and a footprint ranging between about 4–13 cm.
2. The baseball throwing machine of claim 1 wherein the pneumatic tire has a diameter of about 15 cm, a wall depth of about 5 cm, and footprint of about 4 cm.

3. The baseball throwing machine of claim 1 wherein the pneumatic tire has a diameter of about 30 cm, a wall depth of about 10 cm, and a footprint of about 13 cm.
4. The baseball throwing machine of claim 1 including a battery source of electric potential mounted on the frame for driving the electric motor.
5. The baseball throwing machine of claim 1 including two ball projecting wheels each driven rotationally by an associated electric motor and both mounting substantially identical pneumatic tires.

See ‘325 patent at col. 4, lines 4–22. Accordingly, the court will address each of the construction disputes seriatim.

A. Legal Standard

“[I]n interpreting an asserted claim, the court should look first to the intrinsic evidence of record, *i.e.*, the patent itself, including the claims, the specification and, if in evidence, the prosecution history.” *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996). The terms within the claims must be given their ordinary and customary meaning according to a person of ordinary skill in the art at the time of the invention. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005) (*en banc*). The claim term should be read “not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification.” *Id.* In fact, the specification “is the single best guide to the meaning of a disputed term.” *Id.* at 1315 (quoting *Vitronics*, 90 F.3d at 1582). Finally, the prosecution history of the patent, which contains the complete record before the Patent and Trademark Office, should be considered and is “often of critical significance” when construing the claims. *Vitronics*, 90 F.3d at 1582.

“In most situations, an analysis of the intrinsic evidence alone will resolve any ambiguity in a disputed claim term. In such circumstances, it is improper to rely on extrinsic evidence.” *Id.* at 1583. Extrinsic evidence may be considered, however, if it “shed[s] useful light on the

relevant art.” *Phillips*, 415 F.3d at 1317. Nonetheless, the intrinsic record is always the primary source for a court to consider when construing the terms within the claims of a patent. *See id.* at 1315. Claim construction that “stays true to the claim language and most naturally aligns with the patent’s description of the invention will be, in the end, the correct construction.” *Phillips*, 415 F.3d at 1316 (quoting *Renishaw PLC v. Marposs Societa’ per Azioni*, 158 F.3d 1243, 1250 (Fed. Cir. 1998)). Within these guidelines, the court construes the terms and phrases in dispute.

B. Analysis

1. The Ball Projecting Wheel

Disputed term	Claims where term appears	Trend’s proposed construction	Jugs’ proposed construction	Court’s construction
ball projecting wheel	1 and 5	wheel with a pneumatic tire mounted thereon ejects or casts outward a ball	wheel that ejects or casts outward a ball	wheel capable of projecting a ball

The language of claim 1 requires “at least one *ball projecting wheel* driven rotationally by an electric motor and mounting a pneumatic tire.” ‘325 patent at col. 4, lines 4–7 (emphasis added). Dependent claim 5 includes the same “ball projecting wheel” element as independent claim 1. *See* ‘325 patent, col. 4, lines 4–9, 19–22. Both parties agree that the “ball projecting wheel” can only project a ball with a pneumatic tire mounted thereon. However, there is a dispute whether the definition of “ball projecting wheel” itself must include a pneumatic tire. Trend argues that the proper construction of “ball projecting wheel” requires a combination of a wheel and a mounted tire because the wheel alone cannot eject the ball. Trend points out that all of the drawings in the ‘325 patent show a wheel or wheels having a mounted tire. *See id.* at figs.1–5.

Jugs claims that Trend's proposed construction is improper because independent claim 1 already provides for the fact that there is a pneumatic tire mounted on the wheel. *See id.* at col. 4, lines 5–6. Jugs' position is that the claims are clear that the wheel throws a ball and the wheel has a tire; a tire is thus involved in throwing the ball. Jugs argues that to add the wheel limitation into the claim again would unnecessarily lengthen and over complicate the language of claim 1.

The court finds that the intrinsic evidence supports a construction of “ball projecting wheel” that does not include the pneumatic tire limitation. Claim construction “is not an obligatory exercise in redundancy.” *O2 Micro Intern. Ltd. v. Beyond Innovation Tech. Co., Ltd.*, 521 F.3d 1351, 1362 (Fed. Cir. 2008) (citation omitted). Rather, “claim construction is a matter of resolution of disputed meanings . . . to clarify and when necessary to explain what the patentee covered by the claims, for use in the determination of infringement.” *Id.* (citation omitted). Here, both parties agree that the “ball projecting wheel” can only project a ball with a pneumatic tire mounted thereon. (*See* Trend's Opening Claim Construction Br. 4; Jugs' Resp. To Trend's Supplemental Claim Construction Br. 5.) Moreover, the language of claim 1 already provides for the fact that there is a pneumatic tire mounted on the wheel. *See* ‘325 patent at col. 4, lines 5–6 (“at least one ball projecting wheel . . . mounting a pneumatic tire.”). There is no reason to construe the claim to recite the pneumatic tire twice. Thus, the court construes “ball projecting wheel” to mean:

a wheel capable of projecting a ball.

2. Wall Depth

Disputed term	Claims where term appears	Trend's proposed construction	Jugs' proposed construction	Court's construction
wall depth	1, 2, and 3	the wall depth is measured along a radius of the wheel from the outermost edge of the wheel to the outermost surface of the pneumatic tire	width of the sidewall as measured along the tire's radius from the innermost edge to the outermost edge of the tire	a measurement along a radius of the wheel from the outermost edge of the wheel to the outermost surface of the pneumatic tire

The language of claim 1 requires “at least one ball projecting wheel . . . mounting a pneumatic tire having . . . a *wall depth* ranging between about 5–10 cm.” ‘325 patent, col. 4, lines 4–9 (emphasis added). Dependent claims 2 and 3 include the same “wall depth” element as independent claim 1. *See* ‘325 patent, col. 4, lines 4–14. Both parties agree that “wall depth” refers to a radial dimension. They disagree, however, as to whether that measurement should be taken as the radius of the wheel or the pneumatic tire. Jugs argues that the claim language is unambiguous that while the wheel mounts a pneumatic tire, the “wall depth” relates only to the tire. Jugs also points to a statement in the specification that states “[t]he foregoing advantages are achieved by providing pneumatic tires 14 that may range in . . . wall depth.” ‘325 patent, col. 3, lines 7–11.

To the contrary, Trend argues that figure 1 of the ‘325 patent clearly shows that the “wall depth” is measured from the outermost edge of the wheel to the outmost surface of the tire. *See id.* at fig.1. Trend points out that other than figure 1, neither the body of the specification nor the claims explicitly define “wall depth” or provide how “wall depth” is measured.

The court finds that the intrinsic evidence supports Trend’s proposed construction that “wall depth” is measured along the outermost edge of the wheel to the outermost surface of the pneumatic tire. “The construction that stays true to the claim language and most naturally aligns

with the patent's description of the invention will be, in the end, the correct construction."

Phillips, 415 F.3d at 1316 (quoting *Renishaw PLC*, 158 F.3d at 1250). Here, the claim language supports the conclusion that the "wall depth" is measured along the outermost edge of the wheel because the "wall depth" measurement recited in independent claim1 is in reference to a pneumatic tire that is mounting a wheel. *See '325 patent*, col. 4, lines 4–9 ("at least one ball projecting wheel . . . mounting a pneumatic tire having . . . a *wall depth* ranging between about 5–10 cm") (emphasis added). Furthermore, figure 1 of the '325 patent clearly shows that "wall depth" is measured from the outermost edge of the wheel to the outermost surface of the tire. *See id.* at fig.1. In addition, Jugs' reference to "wall depth" in the specification does not negate Trend's proposed construction because the reference is to the "description of the preferred embodiment" where the pneumatic tire is already in combination with a wheel. *See id.* at col. 1, line 54–col. 3, line 18; *see also id.* at figs.1–5. Interpreting the language of claim 1 in light of the definition of wall depth provided in figure 1, the court finds Trend's proposed construction to be the most correct. Thus, the court construes "wall depth" to mean:

a measurement along a radius of the wheel from the outermost edge of the wheel to the outermost surface of the pneumatic tire.

3. Footprint

Disputed term	Claims where term appears	Trend's proposed construction	Jugs' proposed construction	Court's construction
footprint	1, 2, and 3	the tire has a footprint (the track, i.e., contact surface, of the tire when encountering a baseball)	thickness as measured from the outermost edge of one sidewall of the tire to the outermost edge of the opposite sidewall	thickness as measured from the outermost edge of one sidewall of the pneumatic tire to the outermost edge of the opposite sidewall

The language of claim 1 requires "at least one ball projecting wheel . . . mounting a pneumatic tire having . . . a *footprint* ranging between about 4–13 cm." '325 patent, col. 4, lines

4–9 (emphasis added). Dependent claims 2 and 3 include the same “footprint” element as independent claim 1. *See id.* at col. 4, lines 4–15. The parties’ dispute is whether “footprint” is the contact surface of the tire encountering a ball or the thickness of the tire from the edge of one sidewall to the edge of the opposite sidewall. Trend argues that “footprint” should be construed to be its plain and ordinary meaning which is a track left by a contacting surface. Furthermore, Trend argues that its proposed construction is proper because it covers tires with relatively flat surface treads as well as tires with rounded surfaces.

On the other hand, Jugs argues that Trend’s speculated plain meaning of “footprint” is incorrect because the specification must be consulted to determine the meaning of a term with respect to the claims at issue. *See Phillips*, 415 F.3d at 1315–16. Jugs asserts that figure 2 of the ‘325 patent unequivocally represents “footprint” as the distance from the outermost edge of one sidewall of the tire to the outermost edge of the opposite sidewall. *See* ‘325 patent at fig.2. Furthermore, Jugs points out that Trend’s proposed construction improperly requires that tires having different cross-sectional or tread shape, or having varying degrees of inflation, would have their footprints measured in different ways. *See Liquid Dynamics Corp. v. Vaughan Co., Inc.*, 355 F.3d 1361, 1367 (Fed. Cir. 2004) (commanding courts to “assign a fixed, unambiguous, legally operative meaning to the claim.”).

The court finds that the intrinsic evidence supports Jugs’ proposed construction that “footprint” is the distance from the outermost edge of the one sidewall of the tire to the outermost edge of the opposite sidewall. The specification may reveal a special definition given to a claim term by the patentee that differs from the meaning it would otherwise possess. *Phillips*, 415 F.3d at 1316. In such cases, the inventor’s lexicography governs. *See id.* In the instant case, the claims and specification of the ‘325 patent reveal that “footprint” is the distance from the

outermost edge of one sidewall of the tire to the outermost edge of the opposite sidewall, not a track left by a ball. Looking at the ‘325 patent, the claims do not describe the footprint in reference to a ball. *See* ‘325 patent at col. 4, lines 4–22 (“at least one ball projecting wheel . . . mounting a pneumatic tire having . . . a footprint ranging between about 4–13 cm). And, figure 2 of the ‘325 patent clearly defines “footprint” as the distance from the outermost edge of one sidewall of the tire to the outermost edge of the opposite sidewall. *See id.* at fig.2. There is nothing in the specification that suggests a different construction.¹ *See Phillips*, 415 F.3d at 1314–16. Thus, the court construes “footprint” to mean:

thickness as measured from the outermost edge of one sidewall of the pneumatic tire to the outermost edge of the opposite sidewall.

4. Each Driven Rotationally by an Associated Electric Motor

Disputed term	Claims where phrase appears	Trend’s proposed construction	Jugs’ proposed construction	Court’s construction
each driven rotationally by an associated electric motor	5	each wheel is rotated by its own associated electric motor. For this two wheel configuration, there are two electric motors, one for each wheel.	each driven rotationally either by its own electric motor or by a single motor common to both	each ball projecting wheel is rotated by its own electric motor

Claim 5 provides “[t]he baseball throwing machine of claim 1 including two ball projecting wheels *each driven rotationally by an associated electric motor.*” ‘325 patent at col. 4, lines 19–21 (emphasis added). The parties’ dispute is whether one electric motor can drive more

¹At the *Markman* hearing, Trend asserted that the ‘325 patent was limited to throwing baseballs. Trend’s assertion only fortifies the court’s position that Trend’s proposed construction of the term “footprint” is wrong because a baseball, having a diameter of only about 7.5 cm and a semicircular arc length of less than 12 cm, is incapable of producing the maximum footprint of 13 cm recited in claim 1.

than one wheel. Jugs argues that claim 5 can be read to encompass either a single motor driving both wheels, or two motors each driving one wheel. Jugs further argues that the law of claim construction prohibits limiting the broader claim language to the multiple “electric motor” embodiments in the specification. *Phillips*, 415 F.3d at 1323 (“although the specification often describes very specific embodiments of the invention, we have repeatedly warned against confining the claims to those embodiments”).

To the contrary, Trend argues that the claim language and the specification indicate that each of the two wheels is rotated by its own electric motor. Trend contends that Jugs cannot read out the terms “each” and “associated” from the claim language because claim construction must give meaning to every word in the claim. *See Exxon Chemical Patents, Inc.*, 64 F.3d at 1557 (recognizing that “[the court] must give meaning to all the words in [the] claims”). Trend asserts that the term “each” commonly means that every one of two or more is considered separately, and “associated” commonly means joined or connected with another thing. Hence, each individual wheel of the two wheels is joined or connected with its own motor. Trend also argues that in the specification and drawings, a plurality of wheels is always associated with a plurality of electric motors. *See e.g.*, ‘325 patent, abstract (“a pair of rotary wheels” and “a pair of electric motors each associated with one of the rotary wheels.”); *id.* at figs.1–5.

The court finds that the intrinsic evidence supports Trend’s proposed construction that “each driven rotationally by an associated electric motor” means each wheel is rotated by its own electric motor. Jugs’ proposed construction in effect invites the court to read language out of the claim. The court cannot do this. *See Ethicon Endo-Surgery, Inc. v. U.S. Surgical Corp.*, 93 F.3d 1572, 1582 (Fed. Cir. 1996). Instead, the court focuses on understanding how a person of ordinary skill in the art would understand “each driven rotationally by an associated electric

motor" after reading the entire '325 patent. *See Phillips*, 415 F.3d at 1323. First, the '325 patentee used the terms "each" and "associated" in the abstract to indicate that each wheel is driven by its own electric motor. *See* '325 patent, abstract ("[t]he frame mounts a pair of electric motors each associated with one of the rotary wheels for rotating the latter"). In addition, the '325 patentee used the term "associated" in the "description of the preferred embodiment" to indicate that one rotary tire can be partnered with a fixed pad. *See id.* at col. 3, lines 22–23 ("the ball throwing machine may have only one rotary tire associated with a fixed pad."). And finally, in the specification, there is no teaching, disclosure or suggestion that one motor can rotate more than one wheel. *See e.g., id.*, abstract ("[t]he frame mounts a pair of electric motors each associated with one of the rotary wheels for rotating the latter"); *id.* at col. 1, lines 59–61 ("base member 10 supporting electric motors 12 which in turn support wheels mounting pneumatic tires 14"); *id. at col. 2, lines 63–65* ("[t]his invention is directed to the provision of smaller and lighter wheels and tires 14 and correspondingly smaller and lighter drive motors 12."). Based on the foregoing, the court finds that a person of ordinary skill in the art would understand "each driven rotationally by an associated electric motor" to mean each ball projecting wheel is rotated by its own electric motor. The '325 patentee did not have to include the terms "each" and "associated" in claim 5. Having done so, he must live with the language he chose. Thus, the court construes "each driven rotationally by an associated electric motor" to mean:

each ball projecting wheel is rotated by its own electric motor.

5. Battery Source of Electric Potential Mounted on the Frame

At the *Markman* hearing, both parties stipulated that "battery source of electric potential mounted on the frame" means:

battery mounted on the frame.

The court accepts the parties' stipulated construction.

6. Three to One Ratio Between Diameter and Wall Depth

There is no mention in the claims or specification of a requirement that the ratio of diameter to wall depth is required to be approximately 3 to 1. *See* '325 patent. However, Trend asks the court to import such a limitation from the prosecution history. Trend argues that the '325 patent applicant amended the claims to inject the "3 to 1 ratio" and repeatedly and emphatically argued that the "3 to 1 ratio" was important to the proper operation of the pitching machine. Trend provides several statements made by the '325 patent applicant that emphasize the importance of a 3 to 1 ratio and the fact that a 3 to 1 ratio was not found in the prior art of record.

On the other hand, Jugs argues that the court should not import the ratio limitation because no ratio limitation is mentioned or even suggested in the claims or specification and because the '325 patent applicant never made a clear and unmistakable surrender of subject matter. Jugs asserts that the prosecution history demonstrates the '325 patent applicant distinguished prior art machines by pointing out that they did not disclose any tire dimensions at all, not by the maintenance of a ratio between tire diameter and wall depth. Jugs' also points out that the '325 patent applicant volunteered a reference to a 3 to 1 ratio in response to an Advisory Action that did not even mention the issue. Most importantly, Jugs emphasizes the fact that neither the Examiner, in rejecting the application that matured into the '325 patent, nor the patent appeal board, in reversing the Examiner, made mention of any ratio.

The court declines to read a ratio limitation into the '325 patent claims because the '325 patent applicant did not make a clear and unmistakable disavowal of claim scope. Under the doctrine of prosecution disclaimer, a patentee may limit the meaning of a claim term by making a clear and unmistakable disavowal of scope during prosecution. *See Purdue Pharma L.P. v. Endo*

Pharms. Inc., 438 F.3d 1123, 1136 (Fed. Cir. 2006). Amendments or arguments that are merely vague, ambiguous, or subject to other reasonable interpretations are not sufficient to surrender claim scope. *See Omega Engineering, Inc. v. Raytek Corp.*, 334 F.3d 1314, 1325–26 (Fed. Cir. 2003). Here, neither the Examiner nor the patent appeal board made any mention of any ratio during the prosecution of the ‘325 patent. Further, the ‘325 patent applicant’s unsolicited statements regarding the importance of a 3:1 ratio do not equate to a clear and unmistakable surrender of subject matter. Accordingly, the court finds that the claims of the ‘325 patent do not include a limitation that the diameter to wall depth ratio be maintained at 3 to 1.

CONCLUSION

For the foregoing reasons, the court construes the disputed terms and phrases as follows:

Term	Claim where term/phrase appears	Court’s construction
ball projecting wheel	1 and 5	wheel capable of projecting a ball
wall depth	1, 2, and 3	a measurement along a radius of the wheel from the outermost edge of the wheel to the outermost surface of the pneumatic tire
footprint	1, 2, and 3	thickness as measured from the outermost edge of one sidewall of the pneumatic tire to the outermost edge of the opposite sidewall
each driven rotationally by an associated electric motor	5	each ball projecting wheel is rotated by its own electric motor
battery source of electric potential mounted on the frame	4	battery mounted on the frame
3 to 1 ratio between diameter and wall depth	1, 2, and 3 (purportedly)	not required in the ‘325 patent

IT IS SO ORDERED

DATED this 25th Day of November, 2009.



Dee Benson
United States District Judge